



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/010,613 | 12/05/2001 | Paul H. Kaye | 17893.006 | 1920 |
| 28381 | 7590 | 10/04/2005 | EXAMINER | |
| ARNOLD & PORTER LLP ATTN: IP DOCKETING DEPT. 555 TWELFTH STREET, N.W. WASHINGTON, DC 20004-1206 | | | LABAZE, EDWYN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2876 | |

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,613

Applicant(s)

KAYE ET AL.

Examiner

EDWYN LABAZE

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 66-96 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 66-96 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2876

DETAILED ACTION

1. Receipt is acknowledged of amendments filed on 6/23/2005.
2. Claims 66-96 are presented for examination.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. 5,350,715) in view Reber (U.S. 4,725,511).

Re claim 66-67, 71-73, 76-78: Lee teaches chip identification scheme, which includes a microparticle or micro-label (as shown in fig.# 1A) in the form of a wafer, wherein the microparticle is marked with digitally-coded machine-readable information (as shown in fig. # 1B, 2B, and 3B), the machine-readable information being etched through the microparticle as a pattern of holes (col.3, lines 15-35; col.4, lines 55-62).

Lee fails to disclose a thickness of 0.1 to 5.0 micrometers, a width of 0.5 to 50 micrometers and length of 0.5 to 50 micrometers, wherein the microparticle comprising silicon dioxide or metal [such aluminum].

Art Unit: 2876

Reber discloses high technology decorative materials for watches and fabrication of same, which includes means of making a microparticle of an average size of 0.5 micron (as shown in fig. # 18 col.37, lines 55+). Reber further teaches that the microparticle/coating 14 comprises of silicon dioxide or metal [such aluminum] (col.3, lines 20-48).

In view of Reber's teachings, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further modify the teachings of Lee with extra small particles including the specific range(s) of 0.1 to 5.0 micrometers, a width of 0.5 to 50 micrometers and length of 0.5 to 50 micrometers in order to implement non-visible indicia/barcode that cannot be interpreted with a naked eye. Further such modification would provide an increase security for marking/tagging products with an extra small/miniature items having a non-visible machine-readable code. Furthermore, since it has been held that the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Re Claim 68: Lee teaches a system and method, in which the microparticle is fabricated by a micro-machining method that includes deposition, masking [using photomasking or photolithographic process] and etching steps (col.3, lines 15+).

Re Claim 69: Lee discloses a system and method, wherein the machine-readable information is in the form of a binary code (col.4, lines 5+).

Re Claim 70: Lee teaches a system and method, wherein the microparticle incorporates an orientation [herein referred as a position reference point] marker (col.4, lines 10+).

Re Claim 74: Lee discloses a system and method, whose machine-readable code is readable by an optical device (col.4, lines 1-8).

Re claim 75: Lee teaches a system and method, in which the code is representative data comprising a multiplicity of bits (col.2, lines 60+).

6. Claims 87-94 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Lee (U.S. 5,350,715) in view of Reber (U.S. 4,725,511).

The teachings of Lee have been discussed above.

Lee fails to teach means of utilizing the micro-particle label/tag for marking a vehicle, or jewelry, credit cards, or valuable items, a coating compound, and means of adhering the micro-particle using a transparent lacquer.

Reber discloses coating compositions for retrospective identification of articles, which includes a coating composition for securely attach (using a clear lacquer) micro-particle tag/label to the surface of an article or solid object (col.2, lines 20+; col.8, lines 11-31).

In view of Reber 's teachings, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further modify the teachings of Lee so as to employ a coating composition for securely attach micro-particle label/tag for marking a vehicle, or jewelry, credit cards, or valuable items. Furthermore, such modification would greatly improve the security of the tagged items without any instant notification of the micro-particle tag due the size (0.1 - 5.0 microns) of the tag, which renders the tag invisible to the naked eye. Moreover, such modification would have been an obvious extension as taught by Lee.

Art Unit: 2876

Response to Arguments

7. Applicant's arguments with respect to claims 66-96 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWYN LABAZE whose telephone number is (571) 272-2395. The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

el
Edwyn Labaze
Patent Examiner
Art Unit 2876
October 3, 2005



**THIEN M. LE
PRIMARY EXAMINER**